To: Hanley, Jim[Hanley.James@epa.gov]
From: Adam Broderick
Sent: Tue 8/11/2015 5:34:34 PM
Subject: Re: Suggested inputs to your article and a construction site photo

Great, thank you Jim.
As for pics, I'll stand by with the one you just sent but would be happy to have others to choose from. If I use that one, can the caption be something along these lines? "An EPA work crew at the Standard Mine on Mt. Emmons. Courtesy Photo."
Should I credit the photo another way?
If you send other pics, please let me know who to credit and if you'd like me to include specific captions.

-Adam

On Aug 11, 2015, at 10:21 AM, Hanley, Jim <Hanley.James@epa.gov> wrote:

Adam,

I used tracked changes to add information that may be interesting to your readers. This is the best current construction site photo I can find. Our resident construction manager may have better progress photos and I will ask him to find me a better one before tomorrow. My additions are underlined below and the attachment is your original Word document with tracked changes.

Nearly 3 million gallons pollutes Animas River
Could what happened there, happen here?
By Adam Broderick
After the "catastrophe" last week near Silverton, Colo. when roughly 3 million gallons of toxic water ran into the Animas River, the question arose whether something similar could happen here in the Upper East River Valley. According to local environmental leaders, possibly. While EPA officials working on the old Standard Mine this summer say it isn't likely, Alli Melton of High Country Conservation Advocates (HCCA) says there is no guarantee that Coal Creek is completely safe from acid mine drainage.
The Animas River is a source for Durango's drinking water and a hub for recreation in the area. Last Wednesday, August 5, a safety cleanup team for the Environmental Protection Agency (EPA) accidentally released nearly three million gallons of water contaminated with heavy metals including arsenic, lead, iron, zinc, copper and mercury into the Animas River near the town of Silverton. Last Sunday, Durango County and La Plata County declared a state of emergency. Officials have been warning residents, farmers and outdoor recreationists to avoid contact with the water.
According to a report from Colorado Public Radio, the team dug "into a dam at the Gold King Mine site, hoping to install a drain pipe…but because of the volume of

water and the dam's makeup of soil and not rock, it spewed zinc, iron and contaminants into a runoff channel[HJ1]…"

As of Monday afternoon, the wastewater had reached the San Juan River in New Mexico and the Glen Canyon National Recreation Area had issued a statement saying, "Most river sediments will settle out of the water when the river current slows at Lake Powell." As for how long it will take for water closest to the spill site to be safe again, officials say that's hard to determine because data is always changing as the contaminants make their way through the water. TK update as of Wednesday morning.

Colorado U.S. Senator Michael Bennet issued a statement on the spill late last week. "We urge the EPA to provide the community with information about what water quality tests reveal as quickly as possible," Bennet said in the statement. "Our top priority is to…protect the health and safety of citizens there, focus on cleanup and recovery efforts, and make certain that state and federal agencies are taking all necessary steps to mitigate future problems."

On a local level, Alli Melton of High Country Conservation Advocates (HCCA) told the *Crested Butte News*this accident demonstrates how challenging it is to clean up the legacy of acid mine drainage. "Over the years, we've seen how complicated these efforts often are when working in headwaters, involving complex hydrology between mine workings, ground water, and surface water, as well as seeps and springs, among other things. Most unfortunately, it's the communities and taxpayers that are stuck with the legacy of contamination long

after the mining has died out and still in 2015 with no silver bullet to remedy the contamination," she said.

Melton said that although Crested Butte also has a legacy of acid mine drainage, here much of it is being treated by a water treatment plant operated and owned by U.S. Energy. However, no bond has been imposed on the plant, which would be a problem should U.S. Energy ever put operations on hold.

According to Melton, "Without a bond, we have no guarantee that the plant will continue to run without interruption, even though we rely on its continued operation to prevent Coal Creek from having acid mine drainage discharged directly into it."

The Crested Butte Town Council agreed at a meeting in late-July, at the request of the Red Lady Coalition and HCCA, to go on record saying the town needs protection and ask state and federal agencies to impose a bond on the plant. A letter is currently in the process of being drafted and an update could be presented at next week's council meeting.

Regional Project Manager for the EPA, Christina Progess, said in an email that the EPA is very concerned about what's happened at the Gold King Mine and that the management team at the Standard Mine on Mt. Emmons near Crested Butte has plans in place to help reduce the likelihood of a similar event happening there.

Progess addressed several differences between the Gold King Mine and the Standard Mine. She said there is a much better understanding of the water levels inside the Standard Mine than at the Gold King Mine because the team has been inside the Standard Mine and boreholes from surface have been drilled into the old mine workings so that the presence of contaminated water levels and any buildup

in pressure can be measured.

"The workings within the Standard Mine are not completely full of water," Progess noted. "We are driving a new tunnel to intercept existing workings behind collapses within the lowest level of the mine. In addition, as this new tunnel (i.e. bypass adit) approaches the old Level One workings, the construction contractor will drill 1-1/2 inch-diameter probe holes from underground to intercept the old workings and monitor for the presence of water trapped behind collapses of rock and debris. Any impounded water can be drained through the probe holes slowly enough to be held in the sedimentation ponds outside the portal. We have precautions in place such as containment ponds to trap sediment and water as it flows from the workings and will be treating this water as it comes out prior to discharging it to Elk Creek. We also have a communication plan set up with the Crested Butte water treatment plant whereby we will notify them if a major release of contaminated water were to occur as a result of our work at Standard. This will allow them to switch to an alternate drinking water source if necessary."

Carol Worrall, director of Public Health in Gunnison County, said that after seeing what happened to the Animas she wondered if something similar could happen here. She also said there is a certain amount of 'we have the purest

water' mentality here in Crested Butte, but that we might not be aware of particular metals. She provided statistics showing that almost 70 percent (confirm #) of people in Gunnison County rely on private wells and that most people, when testing their wells, test for bacteria. But for cases like these, water needs to be tested for heavy metals, which aren't as easily detected.

"The responsibility for the private wells lies on the property owners," Worrall said, "People tend to have their wells tested when they're initially getting permits, but then go about their lives and don't do further testing. Most people, when testing their wells, test for bacteria. But when you're looking at mining, you're looking at heavy metals."

Worrall said that when she read about the Animas spill, she thought the visuals were pretty shocking and had hopes that maybe the spill would help influence people here to test their own well water. She thinks it would be best for people to test their well water, then, if there were some later disturbance, conduct follow-up testing.

According to the Colorado Department of Public Health website, there is no generic water test for everything so each contaminant must be evaluated individually. However, if you're buying or building a house and need to have a well tested, a standard test is available and testing supplies are free of charge.

Call (303) 692-3048 for more information and to order water tests.

Sincerely,

James Hanley
Mining Engineer
Office of Environmental Protection and Remediation
US EPA Region 8

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From: Adam Broderick [mailto:adam@crestedbuttenews.com]
Sent: Tuesday, August 11, 2015 9:09 AM
To: Hanley, Jim
Subject: animas river spill

Jim,

Thanks for any feedback, additional information or even a short quote to add to this.

Please respond with the image as well.

-Adam

Adam Broderick
<Adam Broderich CB News article 20150813.docx><IMG_0054.JPG>

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